

Mid-Year (August 2010 to July 2011) Arsenic Summary in the California Aqueduct.

The Department of Water Resources (DWR) routinely collects surface water samples at locations above and below groundwater pump-in points along the State Water Project (SWP). When non-project water is pumped into the SWP, samples are also collected at or near these pump-in locations. The samples are analyzed for a number of contaminants by DWR's Bryte Laboratory and the data are available at: <http://www.water.ca.gov/waterdatalibrary/>.

Table 1 summarizes the total acre-feet (AF) of groundwater pump-in volumes from August 1, 2010 to July 31, 2011. Table 2 summarizes the constituent concentrations in the SWP above and below the pump-in locations for the same time period. There were minimal differences in dissolved arsenic concentrations in the SWP below the pump-in locations.

Table 1: Total Groundwater Pump-in Volume in acre-feet (August 1, 2010 to July 31, 2011)

Year	Month	STWSD	CVC	KWB Canal	AEWSD	Monthly Total	Chrisman Pumping
2010	August	14	0	26	0	40	196,121
2010	September	35	0	23	6	64	185,614
2010	October	17	0	160	3	180	161,234
2010	November	5	0	182	2	189	145,785
2010	December	137	0	205	3	345	116,863
2011	January	4	0	0	2	6	105,797
2011	February	2	172	146	2,318	2,638	130,141
2011	March	11	0	0	2	13	118,607
2011	April	10	4,899	0	2,588	7,497	126,134
2011	May	9	14,064	26,455	7,619	48,147	136,664
2011	June	631	4,550	3,034	3,550	11,765	153,506
2011	July	15	0	0	4	19	180,403
Total (AF)		890	23,685	30,231	16,097	70,903	1,756,869

STWSD= Semitropic Water Storage District, CVC= Cross Valley Canal (operated by Kern County Water Agency), KWB=Kern Water Bank (operated by the Kern Water Bank Authority), and AEWSD= Arvin-Edison Water Storage District.

Table 2: Average Water Quality in the SWP Above and Below Groundwater Pump-in Locations (August 1,2010 to July 31, 2011)

		Arsenic	Bromide	Nitrate	Sulfate	TDS	TOC
Above Pump-ins	Checks 21						
		0.001	0.15	2.0	25	180	3.2
	(number of samples)	12	12	12	12	12	12
Below Pump-ins	Checks 39 and 41	0.002	0.14	2.0	25	173	3.3
	(number of samples)	13	13	13	13	15	12
Average Increase/Decrease		-0.001	0.01	-	-	7	-0.1

All values in mg/L (ppm), DWR data only.